## SIERRA 07/26/13 - 07/27/13

Aircraft: SIERRA - ARC (See full schedule)

Flight Number: 80

Payload Configuration: SlimSAR/Jade

Nav Data Collected: No Total Flight Time: 4.5 hours

Submitted by: Mark Sumich on 07/29/13

Flight Segments:

From:	Oliktok	То:	Oliktok				
Start:	07/26/13 21:48 Z	Finish:	07/27/13 02:15 Z				
Flight Time:	4.5 hours						
Log Number:	13R301 - Completed as of this flight.	PI:	James Maslanik				
Funding Source:	Randy Albertson - NASA - SMD - ESD Deputy Airborne Science Program						
Purpose of Flight:	Science						
Comments:	The aircraft was fueled to a capacity of 10 gal for this flight which would be its first science flight of the mission. Takeoff was normal with slightly lower climb performance since this was the first time the aircraft had been flown at 400 lbs TOGW. The transit to international airspace was followed by a north/south transect and an east/west mapping pattern over the sea ice edge. The aircraft appeared to be operating normally and was approximately 2/3 complete with the 6 hour flight and halfway thru the mapping pattern when at approximately 1813 local, there was a momentary loss of the Iridium C&C link. The GCS operator was recording this event when the Iridium system reacquired the signal after approximately one minute (note that loss of Iridium is expected and had been occurring occasionally during the flight with reconnect times ranging from 1-4 minutes). Upon reacquisition of the Iridium C&C link, the RPM and Alternator warning lights were illuminated on the GCS display. The RPM display was at zero RPM and the bus voltage was 24V, indicating the aircraft was operating solely from batteries and that the enginedriven alternator was not charging them. The aircraft was already descending lower than its commanded altitude of 1000' MSL in a controlled glide at the commanded 56 kts. The aircraft continued this glide until impact with the surface at which time the Iridium link went down at 1815 local. Post-mishap actions were executed and an Accident Investigation Board will be convened to determine the cause of the accident.						

Flight Hour Summary:

	13R301
Flight Hours Approved in SOFRS	80
Total Used	5.8
Total Remaining	74.2
13R301 Flight Reports	

13R301 Flight Reports						
Date	Flt #	Purpose of Flight	Duration	Running Total	Hours Remaining	Miles Flown
07/26/13	79	Check	1.3	1.3	78.7	
07/26/13 - 07/27/13	80	Science	4.5	5.8	74.2	

Flight Reports began being entered into this system as of 2012 flights. If there were flights flown under an earlier log number the flight reports are not available online.

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Page Editor: Brad Bulger

NASA Official: Marilyn Vasques